Education about HIV Pre- and Post-Exposure Prophylaxis: How Mental Health Clinicians Can Prevent HIV Transmission in Integrative Practice

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Introduction

With a basic understanding of pre-exposure prophylaxis (PrEP) and post-exposure prophylaxis (PEP), mental health clinicians can play an important role in HIV prevention.

Background

As of February 2017, new CDC estimates show a decline in the United States annual HIV new infection rate for the years 2008–2014, from an estimated 45,700/year to 37,600/year, but not for all areas and populations. Declines are attributed to the nation's high-impact prevention approach https://www.cdc.gov/nchhstp/newsroom/docs/factsheets/hiv-incidence-fact-sheet_508.pdf. However, among some populations, such as gay and bisexual males ages 25–34, and among minority communities, rates are increasing. With approximately 1.2 million people living with HIV, 1 in 8 is unaware of their status (CDC, 2016a). Also, the prevalence of HIV is higher among people with mental illness than the general population, and at the same time, the prevalence of psychiatric disorders and emotional distress is higher among people with HIV relative to the general population. As a result, mental health clinicians frequently provide care for people living with HIV. Thus, whether providing care for people whose HIV status is positive or negative, mental health clinicians can fulfill an important role in HIV prevention.

Mental health clinicians are uniquely poised to use their skills to not only treat psychiatric disorders but also to provide recommendations that protect the health of their patients and communities and to reduce HIV transmission.

The National HIV/AIDS Strategy for the United States: Updated to 2020 provides for a multidimensional approach to HIV primary prevention that includes the following:

- Routine HIV screening and testing, at least once, for everyone over age 13
- Rapid referral to and engagement in HIV care for people who test HIV positive and linkage to prevention services for those who test negative
- Education about safer sex and risk factors
- Correct use of barrier protection
- Use of available harm reduction approaches
- Mental health care for psychiatric disorders:
  - » Posttraumatic stress disorder and depressive disorders—Treatment with psychotherapy and medication
  - » Substance-related and addictive disorders – Psychotherapy, counseling, medication, drug rehabilitation programs, syringe service programs, and safe injection centers

For clients with substantial risk for acquiring HIV, the National HIV/AIDS Strategy also recommends the use of pre-exposure prophylaxis (PrEP) and post-exposure prophylaxis (PEP) (CDC et al., 2014; CDC, 2014a). The goal of this comprehensive approach to prevention is to eliminate or reduce the transmission of HIV.

The Unique Role of the Mental Health Clinician in HIV Prevention

Mental health clinicians can play an important role in a comprehensive approach to HIV prevention and engagement in care. Mental health clinicians in every discipline—addiction counselors, social workers, psychiatric nurse clinicians and practitioners, psychiatrists, psychologists, and case managers that support clinical care and outreach—will encounter opportunities for HIV prevention in every setting, including the emergency department, drug rehabilitation, medication-assisted treatment, (i.e., methadone, buprenorphine, naltrexone), general care, and inpatient and ambulatory psychiatry. Also, a related role resides with individuals most at risk and with multiple challenges, such as medical, social/economic, and drug/pharmacological. Through patient education, they in turn frequently bring others to care—with them or separately—for mental health, HIV, and other services.

HIV is transmitted primarily through sexual activity and, increasingly, through injection drug use (IDU). IDU risk for HIV is evident in viral transmission through shared injection equipment. However, any substance misuse or addiction may introduce a significant risk for HIV transmission. Alcohol, stimulants, and other drugs can cause intoxication, leading to impaired judgment and risky behaviors, such as unprotected or nonconsensual sexual encounters.

Mental health clinicians can help prevent HIV transmission by doing the following:

- Offering HIV testing as part of every routine initial evaluation
- Evaluating substance use and misuse
- Taking a sexual history and assessing sexual function
- Assessing HIV risk for clients who are HIV negative and at substantial risk for acquiring HIV
- Educating about and recommending further assessment for PrEP and PEP, which may be lifesaving and have wide-reaching public health implications

What Mental Health Clinicians Need to Know about PrEP

PrEP is a continuous, daily oral combination antiretroviral medication. It is initiated prior to potential exposures to HIV as a means of reducing the risk for HIV infection among HIV negative persons who are at high risk for infection. It is one way for people who do not have HIV to reduce their risk of infection by taking a single pill that is formulated from a specific combination of two antiretroviral medications: tenofovir disoproxil fumarate (also called TDF, or tenofovir) and emtricitabine (also called FTC). These drugs are formulated into a single pill to be taken daily for HIV prevention on a continuous basis and are not the same combination for HIV treatment.

PrEP assessment is recommended for anyone who is HIV negative and who:

- Is in a monogamous sexual relationship with a partner who is HIV positive.
- Uses heroin or other drugs by injection or is in a sexual relationship with someone who uses drugs by injection.
- Does not use condoms by choice because of fear of intimate partner violence or other reasons.
- Is a sexually active person and not in a mutually monogamous relationship with a partner who recently tested HIV-negative.
- Has had anal sex without a condom or been diagnosed with a sexually transmitted infection (STI) in the past 6 months.
- Does not use condoms consistently with partners of unknown HIV status.
- Has injected drugs in the past 6 months using shared injection equipment.
- Is female with a partner who is HIV-positive. The use of PrEP is one of several options to protect her health, including during conception and pregnancy.

For both sexual transmission and parenteral transmission during IDU, there is clear evidence that PrEP can help stop the virus from establishing a permanent infection when used consistently. Consistent use of PrEP can decrease transmission of HIV by 92% (Baeten et al., 2012; Grant et al., 2010; Choopanya et al., 2013; CDC, 2014a).

How to Begin a Discussion of PrEP

By recommending PrEP, the mental health clinician has a remarkable opportunity to help prevent HIV transmission and ensure a safe and comfortable relationship between the members of sero-discordant couples (person with a positive HIV status with another person with a negative HIV status).

Following, is an example of how a mental health clinician can introduce PrEP to a sero-discordant couple (Client A and Client B):

1. "Client A, I understand that since you were diagnosed with HIV, you have been in an ongoing relationship with Client B. Is that correct? And Client B, you have tested negative for HIV throughout that time, correct?"
2. "Client A, because you are on antiretroviral therapy, your viral load has been undetectable, and since you have been using other methods, i.e., condoms, regularly, your chances of transmission are low."
3. "However, Client B, we can now help you practically eliminate any likelihood of getting infected. I recommend that you have a consultation with an HIV clinician about taking medicines similar to, but with a different combination from, the medicines Client A is taking. These medicines are called pre-exposure prophylaxis or PrEP for short."
4. "Now, tell me what you know or have heard about PrEP—either of you—and I will fill in any missing information. Then, I can refer you both to Client A's HIV clinician to talk about Client B getting started on PrEP, if you're open to that."

By understanding PrEP, mental health clinicians can help their patients prevent HIV transmission.

The evidence for the effectiveness of PrEP is strong. When PrEP is used consistently and in combination with other preventive measures, the risk of HIV transmission may not only be reduced but eliminated.

What Mental Health Clinicians Need to Know about PEP

Post-exposure prophylaxis (PEP) differs from PrEP in the indications for use, medicines used, the duration of treatment, and the absence of a strong evidence base for treatment. Nonetheless, PEP is useful in reducing HIV transmission when it is begun as immediately as possible following an isolated exposure (CDC, 2016b).

According to the Updated Guidelines for Antiretroviral Post-Exposure Prophylaxis After Sexual, Injection Drug Use, or Other Nonoccupational Exposure to HIV— United States, 2016 (CDC, 2016c, p. 10):

> The most effective methods for preventing human immunodeficiency virus (HIV) infection are those that protect against exposure. Antiretroviral therapy cannot replace behaviors that help avoid HIV exposure (e.g., sexual abstinence, sex only in a mutually monogamous relationship with an HIV-uninfected partner, consistent and correct condom use, abstinence from injection drug use, and consistent use of sterile equipment by those unable to cease injection drug use). Provision of antiretroviral

medication after isolated sexual, injection drug use, or other nonoccupational HIV exposure, known as nonoccupational post-exposure prophylaxis (nPEP), is less effective at preventing HIV infection than avoiding exposure.

For people who have isolated, inadvertent, or forced exposure to blood or body fluids by sexual contact or inadvertent IDU with unsterile equipment, nPEP may be used to prevent infection (CDC, 2014a). Also, nPEP guidelines cover the exposure during delivery of a newborn to a mother with HIV who has not had the benefit of prenatal care and treatment with antiretroviral therapy, or from accidental exposure of the newborn to maternal blood or body fluids. Education for expectant mothers and families is needed to support ongoing access and engagement in care. When PEP is used following accidental occupational exposure, it is described as occupational post-exposure prophylaxis (oPEP) and will not be addressed in this brief.

Following are examples of indications for the use of nPEP that are more frequently encountered by mental health providers:

- Sexual assault survivors of rape at any age, including childhood, and incest
- Nonconsensual sex
- Inadvertent exposure in an unprotected sexual encounter while intoxicated or on sedatives (i.e., Rohypnol) and unaware of the HIV status of the partner
- Injection drug use

Mental health clinicians should evaluate and immediately refer people for nPEP when a patient presents for care within 72 hours after a nonoccupational exposure of substantial risk for HIV transmission.

All people considered for nPEP should be tested for HIV, preferably using a rapid test called an Ag/Ab combo, an antibody blood test. If rapid HIV blood testing is unavailable, and nPEP is otherwise indicated, it should be initiated without delay and can be discontinued if the patient is later determined to have HIV already, or the source is determined not to have HIV infection. nPEP is not recommended when care is sought more than 72 hours after potential exposure. A case-by-case determination about using nPEP is recommended whenever the HIV status of the source of the body fluids is unknown and the reported exposure presents a substantial risk for transmission if the source had HIV.

How to Begin a Discussion of nPEP (Client A):

1. "Client A, you have been exposed to HIV. We need to work quickly to help prevent the virus from multiplying and causing you to become infected."
2. "By getting you to an HIV specialist or to the emergency department, we can get you the advice and medicines you need to protect yourself from infection."
3. "But in order for you to have full protection, you need treatment within 72 hours after your exposure, and you need to take the medication for at least 28 days."

Conclusion

By having a basic understanding of PrEP and PEP, as well as a linkage for HIV services, mental health clinicians can support HIV prevention. With their skills, mental health clinicians are uniquely positioned to not only treat psychiatric disorders, but to also educate clients and families about HIV prevention and provide recommendations that protect the health of their patients and reduce the likelihood of HIV transmission.

Additional Resources

Pre-Exposure Prophylaxis for the Prevention of HIV Infection in the United States—2014:
A Clinical Practice Guideline
https://www.cdc.gov/hiv/pdf/guidelines/PrEPguidelines2014.pdf
Clinical Providers' Supplement
https://www.cdc.gov/hiv/pdf/guidelinesPrEPProviderSupplement2014.pdf

New Guidelines Recommend Daily HIV Prevention Pill for Those at Substantial Risk
https://www.cdc.gov/nchhstp/newsroom/2014/prep-guidelines.html#Audio

Updated Guidelines for Antiretroviral Post-Exposure Prophylaxis After Sexual, Injection Drug Use, or Other Nonoccupational Exposure to HIV—United States, 2016
https://www.cdc.gov/hiv/pdf/programresources/cdc-hiv-npep-guidelines.pdf

PrEP (Pre-Exposure Prophylaxis) Services: An interactive map to locate PrEP services in the United States
https://aidsvu.org/locators/prep-locator/